

Pacchi. Jesseph's book is to be strongly recommended to all those interested in Hobbes's philosophy and in the philosophy of mathematics in the 17th century.

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Islamic Mathematics and Astronomy. F. Sezgin, Ed., in collaboration with M. Amawi,

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Since 1997, the Institute for the History of Arabic-Islamic Science has reprinted in the series under review almost all of the research literature on medieval Islamic mathematics and astronomy published before 1960 in Arabic and in Western languages. Roughly one-third of the volumes are reprints of books such as Rosen's 1831 edition of the *Algebra* of al-Khwarizmi (Vol. 1), Sedillot's introduction to the astronomical tables of Ulug Beg (Vols. 52–53), and Krause's edition of the Arabic version of the *Spherics* of Menelaus (Vol. 37). Half of the volumes are collections of reprinted articles on one author, such as al-Khwārizmī (Vols. 3–6), Thābit ibn Qurra (Vols. 21–22), 'Umar al-Khayyāmī (Vols. 45–46), al-Kāshī (Vol. 56), and Ibn al-Haytham (Vols. 57–58). The series includes thematically organized volumes on chronology (Vols. 64–65) and on astronomical instruments and observations (Vols. 85–96). The Arabic transmission of ancient Greek texts and the Hebrew and Latin transmission of Arabic texts has also been taken into account. Two Arabic editions of Euclid's *Elements* have been reprinted (Vols. 14–15, 20), and there are volumes on the Arabic transmission of Archimedes (Vol. 62) and Apollonius (Vol. 63). One volume (Vol. 67) deals with the Jewish philosopher Maimonides, who wrote his scientific works in Arabic. The series contains almost no publications which are not reprints; an exception is Vol. 84, a study by E.S. Kennedy on the astronomical handbook *Khāqānī Zīj* by al-Kāshī, which has not appeared elsewhere. A reprint of very rare 19th-century lithographs of al-Kāshī's works is scheduled for the near future. The reviewer is aware of very few publications in the field before 1960 which have not yet been reprinted in the series. Examples are al-Bīrūnī's *Masudic Canon*, one volume of the Hyderabad edition of Arabic editions of ancient Greek texts by Naṣīr al-Dīn al-Ṭūsī, and Latin translations of the "Arabic" books of Apollonius' *Conics*.

Roughly two-thirds of the information now known about Arabic-Islamic mathematics can be found in the historical literature until 1960 which has been reprinted in the series. This literature is not always easily accessible, since articles and books on Islamic mathematics were (and are) published in different languages by a variety of journals and publishers. For this reason, much of the information "known" before 1960 has not yet been taken into account in general histories of mathematics or even in specialized works on Islamic mathematics. Thus the series is a very useful research tool for the history of ancient and medieval mathematics, and most readers, including experts on Islamic science, will find in

the series some interesting papers of which they were previously unaware. Of course, the series should be consulted together with publications after 1960; for reasons of copyright, the Institute for History of Arabic–Islamic Science has no plans to reprint these more modern publications in the foreseeable future.

Individual volumes can be ordered separately, but institutions specializing in Islamic studies or in the history of premodern science may want to purchase the whole series. The volumes have not been provided with introductions and indices. This is a necessary consequence of the fact that the Institute's limited staff is working on an ambitious publication program, which includes similar reprint series in *Islamic Medicine*, *Islamic Geography*, *Islamic Philosophy*, etc., in addition to the journal *Zeitschrift für Geschichte der arabisch-islamischen Wissenschaften* and new volumes of the *Geschichte des Arabischen Schrifttums*. An up-to-date list of the volumes of the series *Islamic Mathematics and Astronomy* with detailed tables of contents can be found at www.rz.uni-frankfurt.de/fb13/igaiw.

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Ibrāhīm ibn Sinān: logique et géométrie au X^e siècle. By Roshdi Rashed & Héléne Bellosta. Leiden/Boston/Köln (Brill), Islamic Philosophy, Theology and Science, Texts and Studies, Vol. 42. 2000. xi + 809 pp. ISBN 90-04-11801-7. Price: EUR 163.- / U.S. \$ 200.

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Ibrāhīm ibn Sinān was an Iraqi geometer and astronomer who died at the early age of 36 or 37 in A.D. 946. Most of his extant works have been available in Arabic in a critical edition [Saidan 1983], but few of them have been translated into a Western language. The book under review contains new editions of five texts by Ibrāhīm ibn Sinān, with French translations and commentaries. Texts (1), (2), and (5) below were edited and translated by Bellosta, texts (3) and (4) by Rashed, who also contributed to the commentary on the other treatises. The texts are:

- (1) Pp. 5–19: A short description, by Ibrāhīm himself, of his own works.
- (2) Pp. 21–228: A treatise on analysis and synthesis, see below.
- (2a) Pp. 229–244: Rashed's commentary on the quadrature of the parabola by Ibrāhīm. This commentary, as well as the introduction on pp. 1–5, was reprinted from [Rashed 1996, 675–679, 681–694]. The text by Ibrāhīm can be found in [Rashed 1996, 696–735]. See also the critical analysis in [Luckey 1941/1999, 18–22].
- (3) Pp. 245–289: A treatise on pointwise construction of conic sections. For a summary, see [Berggren 1986, 87–89].
- (4) Pp. 291–433: An elementary treatise on sundials, of which the first part survives in a single Arabic manuscript. This text was not available to Saidan, but it was the subject of Paul Luckey's 1941 dissertation [Luckey 1941/1999].